DEPARTMENT OF GEOGRAPHY PROGRAMME SPECIFIC OUTCOME

B.A. Geography

Geography mainly concerns changes in spatial attributes in a temporal perspective. The Honours programme in geography is tailored to meet the students' specific educational and professional goals in mind. It focuses on spatial studies, qualitative as well as quantitative, and emphasizes on human-environment relationship. During the first year of the programme, the students are trained on advanced concepts of physical and human geography. The third year allows them to concentrate on specific areas of the subject, on which they complete their field reports. After completing the course, the students will be amply prepared for professional careers in geography and allied disciplines like GIS and Remote Sensing. They will also be able to pursue M.A. /M.Sc. Course in Geography.

The programme specific outcome is as follows,

- 1. Physical Geography: The studnets will be familiar with the physical characteristics of the earth. Students will be aware of the geomorphic processes that shape the earth. They will be able to correlate physical attributes of the earth with the human attributes.
- 2. Human Geography: Students will understand the importance of human activities on the earth. They will understand the impact of human activities on the environment. Students will also understand the reasons of cultural differences amongst the different cultures.
- **3.** Ability to solve problems: They will understand the problems arising due to physical and cultural differences. They will also solve the problems arising due to these differences.
- 4. Conduct Socio-economic surveys: Students will know how to conduct social and economic surveys for the analysis of a specific problem.
- 5. Application of surveying instruments: Students will learn the application of modern surveying instruments such as Dumpy Level, Theodolite etc.
- 6. Application of modern GIS and map making tools: Students will learn the use of modern techniques like GIS and other cartographic techniques.

- 7. Enhancement in the ability conduct a research: Students will be capable of undertaking a research problem and conduct a research in the field of Geography.
- 8. Understand the environmental problems: Students will be able to understand the environmental problems.

F. Y. B. A. Geography

Course Gg110 (A): Physical Geography

- 1. The student who successfully completes this course can able to:
- 2. Explain principal terms, definitions, Concept and theories of geomorphology.
- 3. Discuss development of micro to mega scale landforms.
- 4. Identify different Materials of the earth crust, rock types, and types of weathering, mass movements and types of slope.
- 5. Describe importance of latitude, longitude and the reasons why different countries have different time zone and date.
- 6. Apply knowledge of basic landforms from tectonic, volcanic, fluvial and coastal environments.
- 7. Evaluate exogenous and endogenous processes in the landscape, their importance in landform development, and distinguish the mechanisms that control these processes.

Course Gg110 (B): Human Geography

- 1. The student will understand the basic concepts of human geography.
- 2. The course will also explain the causes of population growth.
- 3. The student will understand the process of urbanization
- **4.** Increase the knowledge of agriculture and will understand the problems of agriculture.

S. Y. B. A. Geography

Course Gg-210: Geography of Disaster Management (General -2)

- 1. After successfully completing this course, students will be able to:
- 2. Describe concepts of Disaster and its relations with Geography.
- 3. Explain terminology and concepts of Disaster Management.
- 4. Implement concepts of hazards in different areas and its Management.
- 5. Explain standard operating procedure on government for disaster management.
- 6. Describe concepts of anthropogenic disaster, its types, causes and management.
- 7. Explain important global level disasters i.e, acid rain, ozone depletion and global warming.
- 8. Demonstrate Disaster Management at local level.
- 9. Suggest methods of protection from disaster and will be able to do disaster management

Course Gg.220: Economic Geography (S-1)

- 1. After successfully completing this course, students will be able to:
- 2. Define basic principles and concepts in Economic Geography.
- 3. Describe dynamic aspect of economic geography.
- 4. Explain Activities for global Economic development.
- 5. List type of resources for economic development and its applications.
- 6. Describe skill of planning the economic development and its management.
- 7. Describe skill of industrial, agricultural transport and trade activities.

8. Apply applications of economic geography in different areas of growth and development.

Course Gg230: Fundamentals of Geographical Analysis (S-2)

- 1. After successfully completing this course, students will be able to:
- 2. Explain basic concepts of map and scale.
- 3. Identify different Types of Map Projections.
- 4. Describe basic of Statistical data and the skill of graphical data representation.
- 5. Apply Surveying Techniques in Geography.
- 6. Explain about preparation of layout.
- 7. Describe surveying instruments and their applications.
- 8. Demonstrate preparation of drawing profile with the help of Dumpy Level.
- 9. Conduct geographical field investigation and report writing.

T.Y.B.A. Geography

Course Gg 310: Human Geography (G-3)

After successfully completing this course, students will be able to:

- 1. Describe nature of man-environment relationship and human capability.
- 2. Explain conditions of living of human beings from primitive life to the modern era.
- 3. Explain human evolution and different races existed since the beginning of living life.
- 4. Describe different tribes and their culture in different geographical areas.
- 5. Explain causes and effect of migration of mankind.
- 6. Analyse relationship between population and available resources.
- 7. Identify and explain spatial distribution pattern of population and environment

Course Gg: 320 Agriculture Geography (S-3)

After successfully completing this course, students will be able to:

- 1. Explain principal terms, definitions, nature and scope of Agriculture Geography
- 2. Discuss fundamental concept, land use, crops, agricultural production and Development, determinants of agricultural activities, physical determinants, and socio-economic determinants.
- 3. Explain different types of agriculture.
- 4. Discuss problems and prospects of agriculture with Indian examples.
- 5. Demonstrate knowledge of irrigation and watershed management.
- 6. Evaluate allied areas in agriculture and agricultural development.

Course Gg-301 Techniques of Spatial Analysis (S-4)

After successfully completing this course, students will be able to:

- 1. Explain basic concepts of statistical and remote Sensing.
- 2. Identify different methods of Relief Representation.
- 3. Describe basic of Statistical data and the skill of data representation.
- 4. Apply Remote Sensing Techniques in Geography.
- 5. Interpret top sheet/ map, aerial photographs and analysis of toposheet/ map, aerial Photographs.
- 6. Conduct Survey of socio-economic conditions of a village and geomorphological field investigation and report writing.

M.A. Geography

Programme Outcome

After successfully completing M.A. Geography Programme students will be able to:

- 1. Apply qualitative and quantitative research techniques to gather and analyze data on social, cultural, and ecological problems.
- 2. Apply clear written and oral communication skills to communicate the results of research.
- Demonstrate connections between everyday life at the local scale and the larger economic, social, and/or environmental forces that network them into a global community.
- 4. Evaluate cultural, social, and environmental processes with a particular focus on space and place, critical theory, practical application, analysis and/or social justice
- 5. Think in spatial terms to explain what has occurred in the past as well as using
- 6. Develop a general understanding of global human population patterns, factors influencing the distribution and mobility of human populations including settlement and economic activities and networks, and human impacts on the physical environment.
- 7. Read, interpret, and generate maps and other geographic representations as well as extract, analyze, and present information from a spatial perspective

Programme Specific Outcome

After completing **M.A. Geography course students will have** PSO1: Knowledge of geographical terms, concepts and Theories. PSO2: Ability of explanation of correlation between geographical facts and processes. PSO3: Development of map preparation and map reading skills. PSO4: Understanding of Regional Geography of India.

PSO5: Ability to use geographical research methodologies and research projects.

Course Outcome

Course GGUT: 111 Principles of Geomorphology

The student who successfully completes this course can able to:

CO1: Explain principal terms, definitions, concept and theories of Geomorphology.

CO2: Discuss how different scales of time and space affect geomorphological processes and the development of micro to mega scale landforms.

CO3: Explain different concept, theories and models for landscape evolution.

CO4: Describe the exogenous and endogenous processes in the landscape, their importance in landform development, and distinguish the mechanisms that control these processes.

CO5: Describe the different Materials of the earth crust, rock types, types of weathering, mass movements and types of slope.

CO6: Apply knowledge of basic landforms from tectonic, volcanic, fluvial, glacial, Aeolian and coastal environments.

CO7: Categorizes slope Segments in various types.

CO8: Categorizes and compares different landforms.

Course GGUT112: Principles of Climatology

The student who successfully completes this course can able to-

CO1: Explain principal terms and concept of Climatology.

CO2: Describe composition and Structure of Earth Atmosphere

CO3: Explain electromagnetic spectrum, its effect on earth atmosphere and types of insulation.

CO4: Explain basic concepts of air temperature, air pressure and its measurement.

CO5: Explain basic concepts of wind and wind measurement.

CO6: Describe scales of Atmospheric Motion and Models of air circulation.

CO7: Explain basic concepts of hydrological cycle, condensation and evaporation.

CO8: Describe concept of Lapse Rate, Stable and unstable Atmosphere, Air Masses & Fronts.

Course: GGUT -113 Principles of Economic Geography

After successfully completing this course, students will be able to:

CO1: Explain principal terms, definitions, concept, nature, scope and recent trends in Economic Geography.

CO2: Discuss types of hypotheses in economic geography and formation and testing of hypotheses.

CO3: Explain economic landscape, theories and models.

CO4: Describe resources and explain significance of natural and human resources in economic development.

CO5: Describe different Factors of Production and related aspects.

CO6: Explain measures of economic development classification of countries.

CO7: Categorizes and compares different countries with their economic development.

Course GGUT.114 Principles of Population & Settlement Geography

The student who successfully completes this course can able to:

CO1: Explain Evaluation of settlement and population geography globally.

CO2: Describe factors influencing growth and distribution of settlements.

CO3: Identify various patterns of settlement using topo sheet.

CO4: Evaluate effects of technology on shelter and pattern of settlement.

CO5: Analyze factors influencing the dispersion and nucleation.

CO6: Measure degree of dispersion and nearest neighbor using Toposheet.

CO7: Apply concepts of Nodality, Centrality, Range, Threshold and Hierarchy to describe the features of settlement.

CO8: Analyze factors responsible for urbanization and influencing the distribution of settlements.

Course GGUT.115 Practical in Physical & Human Geography

After successfully completing this course, students will be able to:

CO1: Describe underlying theory and concepts of experiments in course.

CO2: Calculate agricultural efficiency and analysis of methods, network structures, Lorenz curve and location quotient, logarithmic graph papers, child women ratio, age sex pyramid & dependency ratio, infant mortality rate and age specific mortality and population growth rate and population projection. CO3: Apply gravity model and nearest neighbour analysis

CO4: Document their results, using correct procedures and protocols.

CO5: Perform a quantitative analysis of experimental data including use of computational and statistical methods where relevant.

CO6: Interpret relationships in graph format data and develop an intuition for alternative plotting methods and communicate results from laboratory experiments, orally or in a written laboratory CO7: The student will be able to analyse drainage network, Drainage basin relief analysis, climatic elements and climatic classification.

Course GGUT 121Geoinformatics-I

After successfully completing this course, students will be able to:

CO1: Understand the elements of geoinformatics.

CO2: GIS Applications, GIS Tasks- input, manipulation, management

CO3: Apply database and Data models

CO4: Apply structuring of spatial data

CO5: Data analysis:SQL attributes.

Course: GGUT- 124: Agricultural Geography

After successfully completing this course, students will be able to:

CO1: Students will understand the significance of agriculture.

CO2: Understand the determinants of agriculture.

CO3: Able to understand agricultural regionalization.

CO4: Apply techniques of Bhatia, Kendall

CO5: Understand problems of Indian agriculture

CO6: Student will understand green revolution, and India's agriculture policy

Course: GGUT-128: Industrial Geography

After successfully completing this course, students will be able to:

CO1: Student will understand importance of industries in economy.

CO2: Apply the models of industrial location In real world situation

CO3: Students will understand the problems of industries.

CO4: Students will understand the distribution of industries

Course: GGDT-130: Geography of Tourism

After successfully completing this course, students will be able to:

CO1: Student will understand the importance of tourism

CO2: Factors affecting development of tourism industry

CO3: Case studies in Indian tourism

Course: GGDP-131: Practical in Surveying

After successfully completing this course, students will be able to:

CO1: Students will be able to survey a given area by using surveying instruments like,

Dumpy level, Theodolite and Total Station

Course: GGUP-134:Practical of Statistical Techniques for Geography

After successfully completing this course, students will be able to:

CO1Student will be able to use different statistical techniques.

CO2 Student can use statistical techniques in his research

CO3 Student can use different methods of sampling and data collection

CO4 Develop an idea about theoretical distribution.

Code No. Gg: 301 Title: Geography of India with Special Reference to Maharashtra

After successfully completing this course, students will be able to:

CO1 Describe geographical location, economic position and geological structure of India in relation to World.

CO2 Explain physiographic divisions and drainage system of India.

CO3 Describe climatic regions and seasons of India using climatic data.

CO4 Describe soil types and their distribution in India by using geographical map.

CO5 Describe major forest types, crops and their distribution and production in India

CO6 Describe mineral power resources and major Industries distribution in India

CO7 Evaluate population growth and distribution in India.

CO8 Evaluate regional development in terms of infrastructure, industries and agriculture

Code No. Gg: 302 Title: Interpretation of Topographical Maps and Village Survey / Project Report

After successfully completing this course, students will be able to:

CO1 Explain basic concepts of India topographical maps and Ordnance Survey topographical maps CO2 Interpret Survey of India topographical maps with respect to physical and cultural aspect.

CO3Interpret ordnance Survey topographical maps with respect to physical and cultural aspect. CO4 Identify different methods of Relief Representation.

CO5 Identify different patterns of drainage network, vegetation, settlements and land use.

CO6 Evaluate information on the survey of India topographical map with actual ground information by carrying physical survey of particular location or village.

CO7 Compute information regarding geology, climate, soils and vegetation of the particular location or village

CO8 Survey of socio-economic conditions of a village and geomorphological field investigation and report writing.

Course: Gg-303 Title: Research Method in Geography

After successfully completing this course, students will be able to:

CO1: Describe different surveying instruments and field survey methods with computation and drawing.

CO2: Infer topographical maps, aerial photographs and satellite images and create database.

CO3: Apply knowledge of statistical methods in geographical research.

CO4: Apply GIS techniques in geography.

CO5: Apply knowledge of field sampling Questionnaire, interviews, measurements and field mapping.

CO6: Plan field work and able to write report.

Code No. Gg: 321 Title: Political Geography

After successfully completing this course, students will be able to:

CO1 Student will know concepts in political geography

CO2 Student will correlate current political events with geography

CO3 Better understanding of Geopolitics

Code No. Gg: 332 Title: Practicals in Economic Geography

After successfully completing this course, students will be able to:

CO1 Student will understand techniques in agriculture geography

CO2 Student will understand techniques in industrial geography

CO3 Student will understand techniques in transport geography

CO4 Student will use these techniques in research

Code No. Gg: 401 Title: Theoretical and Applied Geography

After successfully completing this course, students will be able to:

CO1: Explain development of geography in the ancient, mediaeval and modern period.

- CO2: Describe dualism, dichotomies, paradigms, system approaches and models in geography
- CO3: Explain recent trends in geography

CO4: Apply knowledge of geographical concepts.

CO5: Describe techniques in land-use planning, regional planning and urban planning.

CO6: Explain resource management, environmental management, natural hazards.

Course: Gg-402 Principles of Remote Sensing and GIS

After successfully completing this course, students will be able to:

CO1: Explain definition, concepts and principles, components.

CO2: Describe history of development of remote sensing and GIS in India

CO3: Describe methodologies of extracting data from remotely sensed imagery.

CO4: Explain processing and analysis of data collected from remote sensors.

CO5: Apply knowledge of remote sensing and Geographical Information System in assessment, planning and monitoring in real life application.

CO6: Apply knowledge Spatial data analysis.

CO7: Integrate RS and GIS data.

Course: Gg-403 Practical in Remote Sensing and GIS

After successfully completing this course, students will be able to:

CO1: Explain concept, measurements interpretation of aerial photographs and satellite images.

CO2: Describe GIS-concepts, GIS- definition, application and data models.

CO3: Apply GIS operations- digitization, raster and vector overlay.

CO4: Apply GIS operations

CO5: Digit from a topo sheet quadrant.

CO6: Apply knowledge of map algebra (AND, OR) and spatial interpolation from a topo sheet quadrant

Course: Gg-404 Geography of Food Security of India

After successfully completing this course, students will be able to:

CO1: Explain basic concepts, importance of food security and availability of food.

CO2: Describe economics of food, food crops their distribution, production and availability.

CO3: Explain food sovereignty.

CO4: Describe food Security conditions in India at national and state level.

CO5: Infer India's food security bill.

CO6: Describe pedagogy of food security.

Course: Gg-405 Geography of Health

After successfully completing this course, students will be able to:

CO1: Explain basic terms concept and definition of Geography of Health

CO2: Describe development, achievements, challenges and approaches to geography of health.

CO3: Infer geographical factors affecting human health.

CO4: Describe classification of diseases with diffusion and causes.

CO5: Describe health care systems in India, with emphasis to rural and Urban environment and health

CO6: Explain planning and significance of health care centers and health services

Gg-407 Regional Geography of SAARC countries

After successfully completing this course, students will be able to:

CO1: Explain history of SAARC Organisation.

CO2: Describe importance, relevance of SAARC Countries.

CO3: Explain general Locations of SAARC Countries- India, Pakistan, Nepal, Bhutan, Bangladesh, Shrilanka, Maldives.

CO4: Explain strategic location of India. 5. Salient Features of SAARC Organisation.

CO5: Explain salient features of SAARC Organisation.

CO6: Describe general locations of SAARC countries- India, Pakistan, Nepal, Bhutan, Bangladesh, Shrilanka, Maldives with emphasis to strategic location of India.

CO7: Infer physiography, climate, drainage, vegetation, and agriculture, economic, demographic and cultural aspects of SAARC countries.

Gg. 404 Geography of Food Security of India

After successfully completing this course, students will be able to:

CO1: Explain concept of food security and importance and availability of food accessibility, utilization food stability.

CO2: Explain concept economic growth and physical factors affecting on food security.

CO3: Identify difference between cash crop and food crop.

CO4: Explain concept of food justice and food sovereignty.

CO5: Describe social injustice - gender inequalities and food security conditions in India at national and state level.

CO6: Describe India's food security bill and importance of food security in India.

CO7: Analysis news from magazines, journals and newspapers is essential for planning of food security regional and national level.